

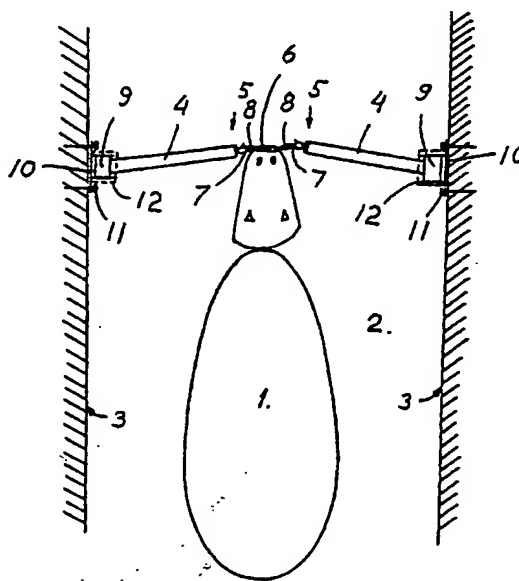


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/SE89/00564 <b>(22) International Filing Date:</b> 13 October 1989 (13.10.89)  <b>(30) Priority data:</b> 8803685-0                      14 October 1988 (14.10.88)      SE  <b>(71)(72) Applicant and Inventor:</b> LILJA, Conny [SE/SE]; Präts- gårdsgatan 28, S-172 32 Sundbyberg (SE).  <b>(74) Agent:</b> BJELKSTAM, Peter; Rådjursvägen 11, S-131 42 Nacka (SE).  <b>(81) Designated States:</b> AT (European patent), AU, BE (Euro- pean patent), BG, BR, CH (European patent), DE (Euro- pean patent), DK, FI, FR (European patent), GB (Euro- pean patent), HU, IT (European patent), JP, KP, KR, LU (European patent), MC, NL (European patent),		NO, RO, SE (European patent), SU, US.  <b>Published</b> <i>With international search report.</i> <i>In English translation (filed in Swedish).</i>

**(54) Title:** TETHERING SYSTEM FOR HORSES**(57) Abstract**

The invention refers to a device for tethering, preferably horses in stable passages, and comprising at least one tethering means fixed to each of the walls (3) forming a stable passage (2) for tethering a horse (1). The tethering means (4) consisting of a flexible strap, rope or the like which is automatically retractable on a spring biased storage spool (9), whereby after tethering the horse the tethering means (4) always are kept in a tensioned state substantially independent of the position or movements of the horse (1) in the stable passage (2) and that after loosening of the tethering means (4) from the halter (6) on the horse (1) these are automatically retractable on the storage spools (9).



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Tethering system for horses

The present invention relates to a device for tethering preferably horses in stable passages, and comprising at least one tethering means fixed to each of the walls forming a stable passage, said tethering means having a predetermined length in order to make a tethering possible of the free end of the tethering means to the halter of a horse, and said means consisting of a flexible strap, rope or the like which is automatically retractable on a spring biased storage spool from its fastening point on the stable passage wall.

Today the tethering of horses in stable passages is done by the aid of chains having one end fixed to one stable passage wall and the other free end fixed to the halter of the horse by the aid of a snap hook. This rigid tether method causes that, during rapid movements of the horse, the halter can break or the horse gets hurt and there is also a big risk that the horse can turn around with big injuries as a consequence. When the tethering means are not used these hit on one hand against the stable passage walls and on the other they are lying partly on the floor or the ground and become rusty. One can also stumble over or get caught by those parts of the tethering means which are lying on the floor.

The object of the present invention is to provide a device of the kind mentioned in the introduction by which the disadvantages described above totally have been eliminated. The distinguishing features of the invention are disclosed in the following claims.

Due to the invention, there has now been provided a device which effectively maintain the horse in its position in the stable passage at the same time as the horse does not feel that it is tied up, since the tethering means accompanies

the movements of the horse e.g. when it moves its head, and also for a given distance should the horse itself move. Old problems are also avoided in this way e.g. when the horse becomes boisterous, with the possible consequence of severe injuries to it, when it is tied up so that it cannot move its head freely.

The invention will now be described in more detail below with reference to the accompanying drawing, which schematically illustrates in a plan view a preferred embodiment of the invention.

As will be seen from the drawing a horse 1 is tethered in a stable passage 2, which is limited by two stable walls 3. Tethering means 4 is fixed to these walls, said means 4 having a predetermined length in making a fastening possible of the free ends 5 of the tethering means 4 to the halter 6 of the horse 1 by aid of a snap hook 7 cooperating with a safety ring 8 on the halter 6. In the embodiment illustrated the tethering means 4 consists of a strap, which is automatically retractable on a spring-biased storage spool 9, said spool is fixable by bolts 11 via a mounting plate 10 at a suitable height on the stable wall 3. The storage spool 9 is arranged in a cover 12 for preventing dust penetration, and the spring bias is variable in response to how strong the returning force or tension in the tethering means 4 which is wanted. Thus this tension can be varied in dependence on how big the horse is to be tied up. The tethering means 4 can preferably consist of a strap of the kind used for safety belts in cars and the storage spools 9 can in turn be of the kind used in association with the safety belts in cars.

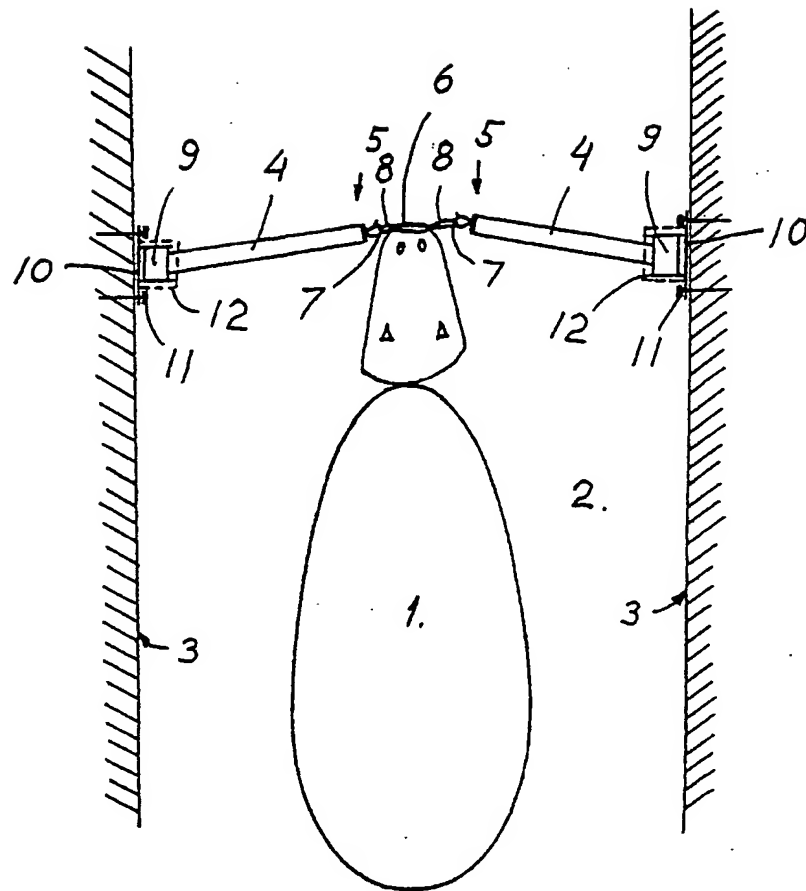
When the tethering means 4 is not used it is in a fully wound up state due to the spring bias of the storage spool 9 and is well protected by the cover 12. When tethering a horse 1 all the person concerned has to do is to take the

4 snap hook 7 on each tethering means 4 and pull it out from  
the respective storage spool 9 the distance needed to tie  
up the horse. The length of the tethering means 4 can vary,  
e.g. for a stable passage 2 having a width of three meters,  
5 each can have a length of about 1,5 - 2 meters. A suitable  
height for fixing the storage spools 9 on the stable walls  
3 can be about 1 - 1,5 meters.

Claims

1. Device for tethering, preferably horses in stable passages (2), and comprising at least tethering means (4) fixed to each of the walls (3) forming a stable passage (2), said tethering means having a predetermined length in order to make a tethering possible of the free end (5) of the tethering means (4) to the halter (6) of a horse (1), and said tethering means (4) consisting of a flexible strap, rope or the like which is automatically retractable on a spring biased storage spool (9) from its fastening point on the stable passage wall (3), characterized in that after tethering the horse (1) the tethering means (4) always are kept in a tensioned state substantially independent of the position or movements of the horse (1) in the stable passage (2).
2. Device according to claim 1, characterized in that the spring bias of the storage spools (9) is variable dependent on how strong the returning force or tension in the tethering means (4) is required.
3. Device according to claim 1, characterized in that the tethering means (4) consists of a strap of the kind which is used as a safety seat belt in cars.
4. Device according to claim 1, characterized in that the storage spools (9) are of the kind used in association with safety seat belts in cars.

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## INTERNATIONAL SEARCH REPORT

International Application No PCT/SE 89/00564

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) <sup>6</sup> According to International Patent Classification (IPC) or to both National Classification and IPC IPC4: A 01 K 1/06, 15/04		
<b>II. FIELDS SEARCHED</b> <div style="text-align: right; margin-right: 100px;">Minimum Documentation Searched <sup>7</sup></div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">Classification System :</div> <div style="width: 45%;">Classification Symbols</div> </div> <div style="margin-top: 10px;">           IPC4 :                      A 01 K         </div> <div style="text-align: center; margin-top: 10px; font-size: small;">           Documentation Searched other than Minimum Documentation            to the Extent that such Documents are included in the Fields Searched <sup>8</sup> </div>		
<b>SE,DK,FI,NO classes as above</b>		
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Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
A	US, A, 4762089 (MCNULTY) 9 August 1988, see the whole document <div style="text-align: center; margin-top: 10px;">-----</div>	1-4
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><sup>14</sup> Special categories of cited documents: <sup>15</sup></p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 48%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p> </div> </div>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search <b>18th December 1989</b>	Date of Mailing of this International Search Report <div style="text-align: center; font-size: large;">1989 -12- 21</div>	
International Searching Authority <div style="text-align: center; font-weight: bold; margin-top: 10px;">SWEDISH PATENT OFFICE</div>	Signature of Authorized Officer <div style="text-align: center; margin-top: 10px;">             Catarina Forssen         </div>	



ANNEX TO THE INTERNATIONAL SEARCH REPORT  
ON INTERNATIONAL PATENT APPLICATION NO.

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4762089	09/08/88	NONE	